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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,900	07/28/2006	Hiroshi Kajiwara	00862.109526.	3595

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FITZPATRICK CELLA HARPER & SCINTO
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EXAMINER

YEH, EUENG NAN

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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03/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/587,900	Applicant(s) KAJIWARA ET AL.	
	Examiner EUENG-NAN YEH	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-44 is/are pending in the application.
- 4a) Of the above claim(s) 33,34 and 38 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 31,32,35 and 36 is/are allowed.
- 6) ☒ Claim(s) 37 and 39-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on January 19, 2010 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

FINAL ACTION

Response to Amendment

1. The following Office Action is responsive to the amendment and remarks received on January 19, 2010. Original claims 33, 34, and 38 were cancelled and claims 31, 32, 35-37, and 39-44 remain pending. The drawings and abstract objections are withdrawn.

Claim Objections – 37 CFR 1.75(b)

2. The following is a quotation of 37 CFR 1.75(b):

(b) More than one claims may be presented provided they differ substantially from each other and are not unduly multiplied.

Claim 44 is objected to under 37 CFR 1.75(b), as duplicated claim. Applicant is advised that should claim 43 be found allowable, claim 44 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP §706.03(k). The examiner suggests cancellation of claims 44 to avoid duplication.

Claim Rejections – 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 39 (and therefore claims 40 and 41 by dependency), 42, and 43 (and therefore claim 44 by dependency) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There are insufficient antecedent basis for the following limitation(s):

- a) Claim 39 recites the limitation "said decomposition means for" in line 16.
- b) Claim 42 recites the limitation "the decomposition steps for" in line 17.
- c) Claim 43 recites the limitation "the decomposition means for" in line 18.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional

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descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claims 37, 43, and 44 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 37, 43, and 44 are drawn to functional descriptive material recorded on a computer-readable storage medium. However, the broadest reasonable interpretation of a claim drawn to a computer readable storage medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media and transitory propagating signals *per se* in view of the ordinary and customary meaning of computer readable storage medium. When the broadest reasonable interpretation of claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See *In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir, 2007) (transitory embodiments are not directed to statutory subject matter) and Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101, August 24, 2009; P. 2.

Because the full scope of the claim as properly read in light of the disclosure encompasses non-statutory subject matter, the claim as a whole is non-statutory. The examiner suggests amending the claim as “A non-transitory computer-readable storage medium” to include the disclosed non-transitory tangible computer readable media,

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while at the same time excluding the intangible media such as signals, carrier waves, etc.

Examiner's Comments

5. Claims 31, 32, 35, and 36 are allowed.

6. Claims 37 and 39-44 would be allowable if amended to overcome the CFR 1.75(b), USC 112, and USC 101 rejections set forth in this Office action above. Another comment for independent claims 31, 36, and 37: please define the first appearance of acronym TB such as threshold TB (or threshold bit TB, etc.)

7. The following is a statement of reason for the indication of allowable subject matter:

The present application comprises some of the elements of the claims, such as the following features, in combination with other recited limitations, which the closest prior art of record and the references cited in form PTO-1449 taken either singly or in combination does not teach or suggest:

- a) a decision unit that detects the code data amount of the current frame multiplexed by said multiplexing unit and decides a number of bitplanes not to be encoded for the subsequent frame, wherein said second coding unit encodes bitplanes of data of the lower TB bits excluding the number of bitplanes, from a lowest bit plane, decided by said decision unit when the preceding frame had been encoded (independent claim 31).

- b) a deciding step of detecting the code data amount of the current frame multiplexed by the multiplexing step and deciding a number of bitplanes not to be encoded for the subsequent frame, wherein the second coding step encodes bitplanes of data of the lower TB bits excluding the number of bitplanes, from a lowest bit plane, decided by said deciding step when the preceding frame had been encoded (independent claim 36).
- c) a decision unit that detects the code data amount of the current frame multiplexed by said multiplexing unit and decides a number of bitplanes not to be encoded for the subsequent frame, wherein said second coding unit encodes bitplanes of data of the lower TB bits excluding the number of bitplanes, from a lowest bit plane, decided by said decision unit when the preceding frame had been encoded (independent claim 37).

Conclusion

8. Applicant's amendment is rejected in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eueng-nan Yeh whose telephone number is 571-270-1586. The examiner can normally be reached on Monday-Friday 8AM-4:30PM EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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